Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

August 21, 2015

Public Health Preparedness and Situational Awareness Report: #2015:32 Reporting for the week ending 08/15/15 (MMWR Week #32)

CURRENT HOMELAND SECURITY THREAT LEVELS

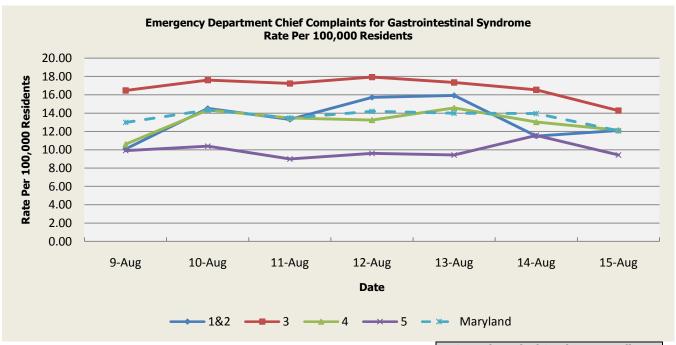
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

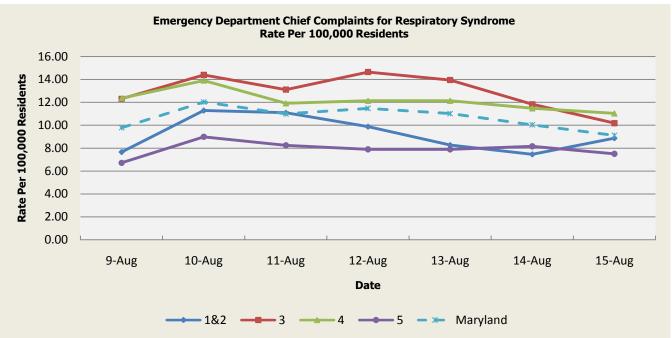
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were two gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis associated with a daycare center (Region 3) and one outbreak of gastroenteritis/foodborne associated with a restaurant (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2	1&2 3 4 5 Maryland							
Mean Rate*	12.95 14.32 15.28 10.11 12.66								
Median Rate*	12.91	14.07	14.57	9.95	12.52				

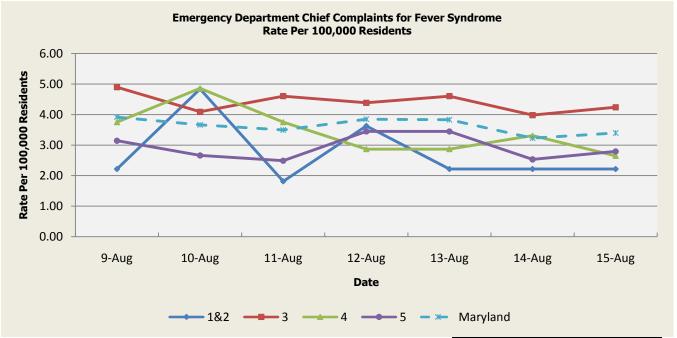
^{*} Per 100,000 Residents



There was one respiratory outbreak reported this week: 1 outbreak of pneumonia in a nursing home (Region 5).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	Maryland						
Mean Rate*	11.91	11.91 13.41 13.72 9.62						
Median Rate*	11.49	12.93	13.25	9.26	11.45			

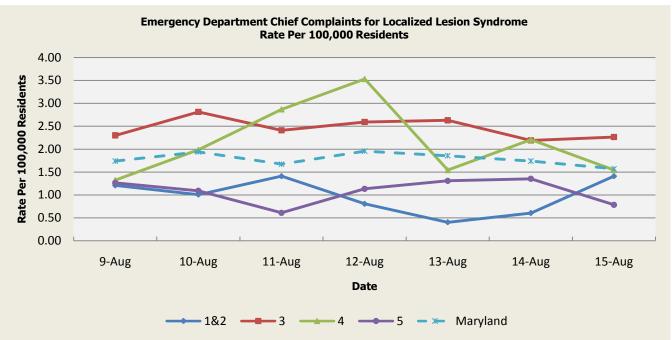
* Per 100,000 Residents



There were no fever outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	3.13 3.66 3.88 3.04 3.39								
Median Rate*	3.02 3.51 3.75 2.92 3.26								

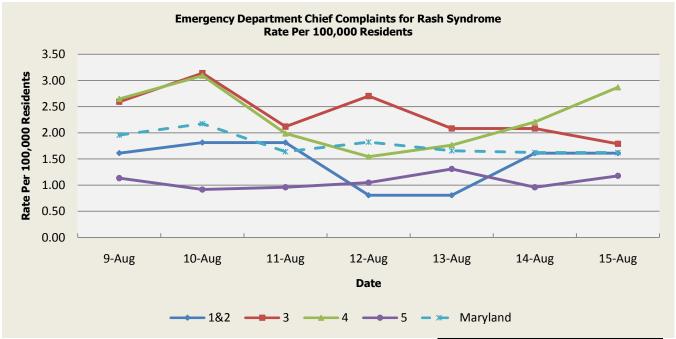
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	1.10	1.92	1.51					
Median Rate*	1.01	1.86	1.99	0.96	1.46			

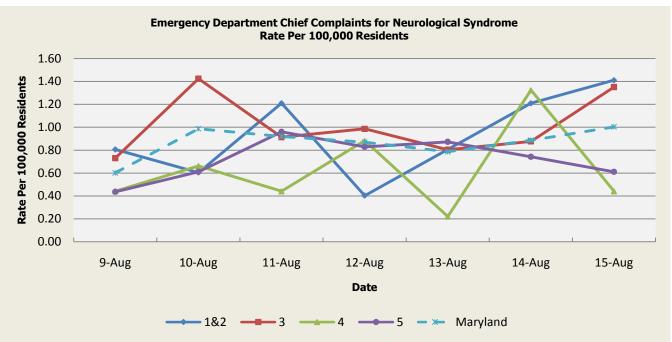
^{*} Per 100,000 Residents



There were two rash illness outbreaks reported this week: 1 outbreak of scabies in a nursing home (Region 5) and 1 outbreak of MRSA associated with a fire station (Region 3).

	Rash Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2 3 4 5 Maryland									
Mean Rate*	1.34 1.73 1.77 1.05 1.44									
Median Rate*	1.21	210 1 2170 2177 2100 2111								

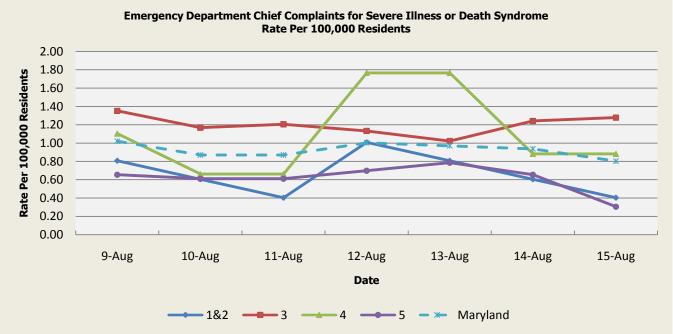
^{*} Per 100,000 Residents



There were no neurological outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	0.62							
Median Rate*	0.60	0.62	0.66	0.44	0.54			

^{*} Per 100,000 Residents

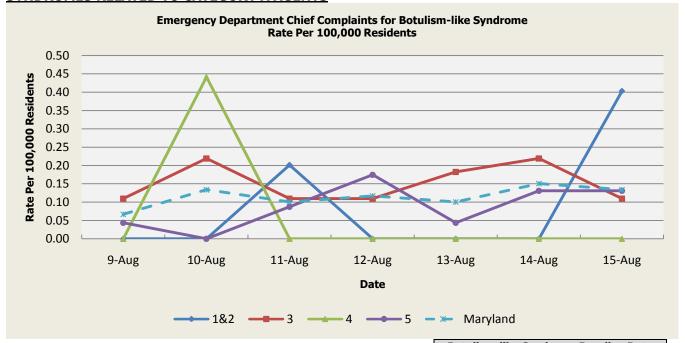


There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2 3 4 5 Maryland									
Mean Rate*	0.75	0.95	0.42	0.73						
Median Rate*	0.81	0.95								

^{*} Per 100,000 Residents

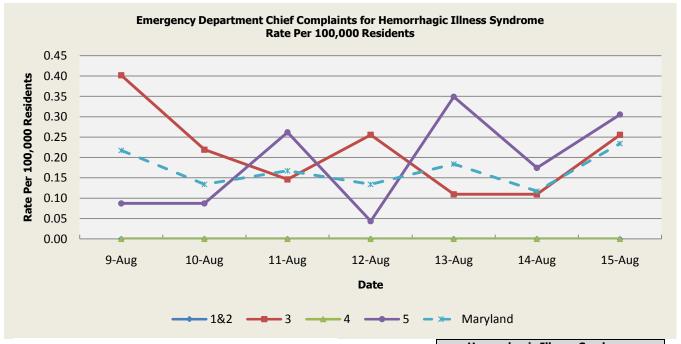
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 8/10 (Regions 3,4), 8/11 (Regions 1&2), 8/12 (Region 5), 8/13 (Region 3), 8/14 (Regions 3,5), and 8/15 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryl								
Mean Rate*	0.06 0.06 0.04 0.04 0.05								
Median Rate*	0.00 0.04 0.00 0.04 0.03								

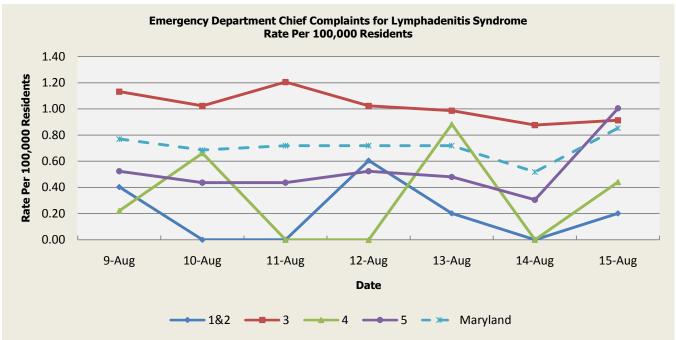
^{*} Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 8/9 (Region 3), 8/10 (Region 3), 8/11 (Regions 3,5), 8/12 (Region 3), 8/13 (Region 5), 8/4 (Region 5) and 8/15 (Regions 3,5). These increases are not known to be associated with any outbreaks.

-	Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	0.03								
Median Rate*	0.00	0.04	0.00	0.00	0.03				

^{*} Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 8/9 (Region 3), 8/10 (Region 3), 8/11 (Region 3), 8/12 (Region 3), 8/13 (Regions 3,4), 8/14 (Region 3), and 8/15 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	0.31 0.37 0.34 0.25 0.32							
Median Rate*	0.20	0.33	0.22	0.22	0.30			

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡						
Condition		August		Cumulat	ive (Year to	Date)**	
Vaccine-Preventable Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Aseptic meningitis	9	28.8	22	245	256.2	277	
Meningococcal disease	0	0.4	0	1	5	5	
Measles	0	0	0	0	0.2	0	
Mumps	0	0	0	7	20.2	2	
Rubella	0	0.2	0	1	1.2	1	
Pertussis	0	12.6	12	55	116.8	103	
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Salmonellosis	32	71.6	74	468	581.8	578	
Shigellosis	5	10.6	11	130	103.2	90	
Campylobacteriosis	12	37	38	393	388	394	
Shiga toxin-producing Escherichia coli (STEC)	1	4.4	5	55	42.4	38	
Listeriosis	0	2	1	10	9.4	10	
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
West Nile Fever	0	1.2	0	2	2	0	
Lyme Disease	11	60	56	693	884.6	885	
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Chikungunya	1	0.2	0	13	4.2	0	
Dengue Fever	0	0.8	1	4	5.4	5	
Other	2015	Mean*	Median*	2015	Mean*	Median*	
Legionellosis	5	6.2	5	74	76	72	

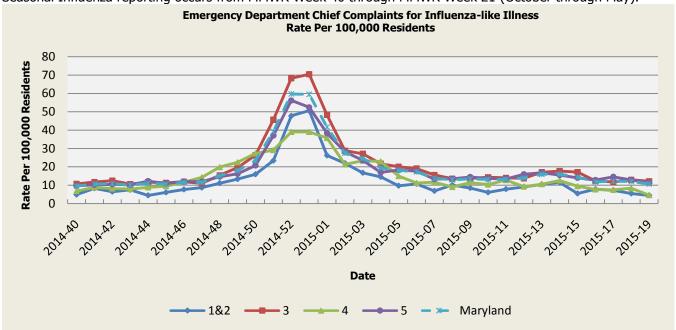
[‡] Counts are subject to change

^{*}Timeframe of 2009-2014

^{**}Includes January through August

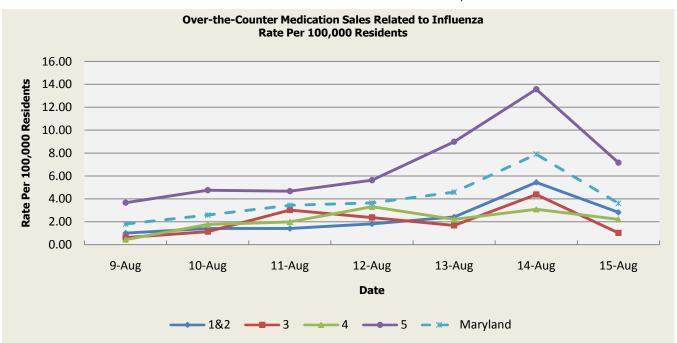
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 21 (October through May).



	Influenza-like Illness Baseline Data Week 1 2010 - Present							
Health Region	1&2	1&2 3 4 5 Maryla						
Mean Rate*	9.41	10.64	10.75	9.80	10.22			
Median Rate*	7.66	8.29	8.83	7.42	7.95			

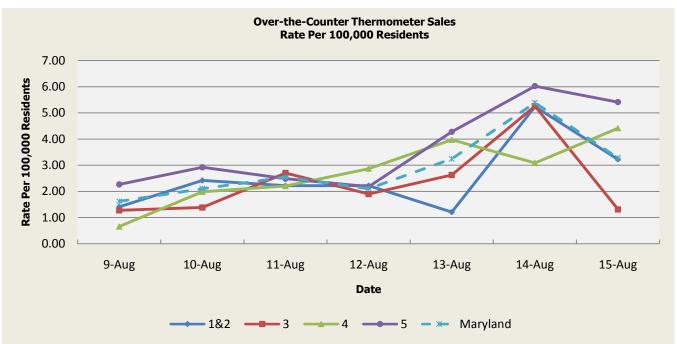
* Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC flu medication sales this week.

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.38	6.05	3.04	13.80	8.74
Median Rate*	4.03	4.90	2.65	11.22	7.08

^{*} Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales this week.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.68	4.72	3.36	7.80	5.88
Median Rate*	5.04	4.35	3.09	7.16	5.42

^{*} Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a deescalation of activities towards those in the interpandemic phase may occur. As of <u>July 17, 2015</u>, the WHO-confirmed global total (2003-2015) of human cases of H5N1 avian influenza virus infection stands at 844, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

No avian influenza in humans reports this week.

There were no reports of human cases of avian influenza in the United States at the time that this report was compiled.

Avian Influenza in Poultry:

HPAI H5 (GAZA): 17 Aug 2015 The infected population includes many kinds of birds, especially ducks, and some other kinds like layers, Bulgarian hens, and pigeons. Birds are raised in farms or backyards. About 604,120 bird eggs, and about 14,150 birds from the outbreak, susceptible or nearby the infected area, have been destroyed. Read More: http://www.promedmail.org/direct.php?id=3584854

H5N6 (CHINA), H5N1 (GHANA): 17 Aug 2015 Two countries, China and Ghana, reported fresh avian influenza outbreaks today from 4 different strains, 3 of them highly pathogenic, according to separate reports to the World Organization for Animal Health (OIE). Read More: http://www.promedmail.org/direct.php?id=3583226

HPAI H5N1 (NIGERIA): 13 Aug 2015 The National Veterinary Research Institute (NVRI), Vom, said on Tue 11 Aug 2015 that new cases of highly pathogenic avian influenza have been discovered in Abia and Enugu states. Dr Mohammed Ahmed, the executive director of the institute, said that it was the 1st time the flu was found in the 2 eastern states. Read More: http://www.promedmail.org/direct.php?id=3575741

NATIONAL DISEASE REPORTS

TULAREMIA (NEW MEXICO, ARIZONA): 19 Aug 2015 The New Mexico Department of Health announced on 13 Aug 2015 a confirmed case of tularemia in a 71-year-old man from Bernalillo County. The case was confirmed at the Department's Scientific Laboratory Division. Two earlier cases of tularemia were reported in a 39-year-old man and a 42-year-old woman from Bernalillo County. They have also recovered. Read More: http://www.promedmail.org/direct.php?id=3580618

SALMONELLOSIS (WASHINGTON): 19 Aug 2015 The strain of Salmonella_ I 4,[5],12:i:- linked to pork that has infected 134 people in Washington, hospitalizing 16, is multi-drug resistant. Read More: http://www.promedmail.org/direct.php?id=3583697

PLAGUE (CALIFORNIA): 19 Aug 2015 California authorities on Tue 18 Aug 2015 reported that they're looking at a 2nd person with the plague in the state, and, like the other case, this one visited Yosemite National Park. Read More: http://www.promedmail.org/direct.php?id=3589079

INTERNATIONAL DISEASE REPORTS

MERS-COV (SAUDI ARABIA): As of 19 Aug 2015, there have been a total of:1118 laboratory confirmed cases of MERS-CoV infection, including 483 deaths, 590 recoveries, and 43 currently active cases (including 3 on home isolation). Read More: http://www.promedmail.org/direct.php?id=3590224

EBOLA (MULTI-COUNTRY): 20 Aug 2015 Read More: http://www.promedmail.org/direct.php?id=3591319

JAPANESE ENCEPHALITIS (INDIA): 19 Aug 2015 Meghalaya has sounded an alert for Japanese encephalitis [JE] after 3 people died of the disease and another 6 were tested positive for the virus, an official said on Tuesday 18 Aug 2015. Read More: http://www.promedmail.org/direct.php?id=3590146

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: http://phpa.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.dhmh.md.gov/

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion (Boils or Bump or Carbuncle or DepressedUlcer or Eschar Furuncle or InsectBite or SkinAbscess or (SkinSores and n AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlce		Anthrax (cutaneous) Tularemia
Lymphadenitis	mphadenitis (BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

